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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/738,478	12/15/2000	Stephane Harnois	G&C 30566.135-US-01	1603
22462	7590	02/10/2005	EXAMINER	
GATES & COOPER LLP HOWARD HUGHES CENTER 6701 CENTER DRIVE WEST, SUITE 1050 LOS ANGELES, CA 90045			REFAI, RAMSEY	
			ART UNIT	PAPER NUMBER
			2154	

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/738,478	Applicant(s) HARNOIS, STEPHANE	
	Examiner Ramsey Refai	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/7/01, 04/30/02</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-30 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3-11, 13-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Pothapragada et al (U.S. Patent No. 6,389,432).

4. As per claim 1, Pothapragada et al teach a networked image data processing environment, comprising:

a plurality of image data processing systems (**column 2, lines 39-67, Figure 16 element 524, Figure 1 and Figure 16; SAN Managers**);

a plurality of data storage systems, wherein each of said data storage systems is operated under the direct control of one of said image processing systems (**Figure 1, Figure 16, column 1, line 60 – column 2, line 3, and column 2, lines 39-53**);

a high bandwidth switching means connected to each of said data processing systems (**Figure 2 element 200, column 5, lines 12-23, and column 1, lines 30-40**);

a low bandwidth network connecting said image processing systems and to said switching means (**column 4, lines 7-15, Figures 1, 2, and 16**), by which one of said processing systems controls the operation of said switching means (**column 4, lines 25-46**), and in which

a first processing system requests access to a data storage system controlled by a second processing system over said low bandwidth network (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**);

said second processing system makes an identification of storage regions that may be accessed by said first processing system and to each of said storage systems (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**);

said second processing system conveys said identification to said first processing system over said low bandwidth network (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**); and

said first processing system accesses said identified storage portion via said high bandwidth switching means (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**) .

5. As per claims 3 and 13, Pothapragada et al teach a data processing environment, wherein said data storage systems include a plurality of disks configured to receive image stripes (**Figure 16, column 4, lines 50-67, and column 14, lines 20-47**).

6. As per claims 4 and 14, Pothapragada et al teach a data processing environment including redundant disks to provide data security (**column 4, lines 50-67 and column 3, lines 1-8**).

7. As per claims 5 and 15, Pothapragada et al teach said disks are configured as a redundant array of inexpensive disks (RAID) (**column 4, lines 50-67**).

8. As per claims 6 and 16, Pothapragada et al teach said high bandwidth switching means is a fibre channel switch (**Figure 2, 200**).

9. As per claims 7 and 17, Pothapragada et al teach low bandwidth network is an Ethernet network (**Figure 1, 2, column 4, lines 7-14 and 40-46 and column 8, lines 35-65**).

10. As per claims 8 and 18, Pothapragada et al teach said processing systems execute programs to identify requests made by other processing systems (**column 1, line 60- column 2, line 53**).

11. As per claims 9 and 19, Pothapragada et al teach at least one image data processing system has direct control of a plurality of data storage systems (**column 2, lines 39-67, Figure 1 and Figure 16; SAN Managers**) .

12. As per claims 10 and 20, Pothapragada et al teach a lower powered data processing systems that are configured to supply image data to image data processing systems connected to said high bandwidth switching means (**column 2, lines 39-67, Figure 1 and Figure 16; SAN Managers**).

13. As per claim 11, Pothapragada et al teach a method of transferring data in a networked image data processing environment, including a plurality of image data processing systems (**Figure 1, Figure 16, column 1, line 60 – column 2, line 3, and column 2, lines 39-53**), a plurality of data storage systems (**Figure 1, Figure 16, column 1, line 60 – column 2, line 3, and column 2, lines 39-53**), a high bandwidth switching means connected to each of said data processing systems and to each of said storage systems (**Figure 2, column 5, lines 12-23, and column 1, lines 30-40**), and a low bandwidth network connected to said image processing systems and to said switching means (**column 4, lines 7-15, Figures 1, 2, and 16**), by which one of said processing systems controls the operation of said switching means (**column 4, lines 25-46**), wherein said method performs the steps of:

operating each of said data storage systems under the direct control of one of said image processing systems (**column 2, lines 39-67, Figure 1 and Figure 16; SAN Managers**);

issuing a request from a first processing system to access a data storage system controlled by said second processing system over said low bandwidth network (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**) ;

making an identification at said second processing system of storage regions that may be accessed by said first processing system (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**);

conveying said identification from said second processing system to said first processing system over said low bandwidth network (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**); and

accessing said identified storage portion by said first processing system via said high bandwidth switching means (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**).

14. As per claim 21, Pothapragada et al teach a computer-readable medium having computer-readable instructions executable by a computer such that, when executing said instructions, a computer will perform the steps of

directly controlling a local disk storage system (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**);

issuing a request to access a data storage system controlled by a second processing system over a low bandwidth network (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**);

receiving an indication from said remote processing system identifying storage locations that may be accessed on said second storage system (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**);

accessing said data portions through a high bandwidth switching means connected to each of said processing systems and to each of said storage systems (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**).

15. As per claim 22, Pothapragada et al teach that when executing said instructions a computer will perform RAID calculations when writing data to a locally controlled disk and

when reading data from said locally controlled disk (**column 7, line 62 –column 8, line 28 and column 6, line 64 – column 7, line 13**).

16. As per claim 23, Pothapragada et al teach that when executing said instructions a computer will issue said requests over an Ethernet network (**column 6, line 64 – column 7, line 13**).

17. As per claim 24, Pothapragada et al teach that when executing said instructions a computer will receive said indication over said Ethernet network (**column 6, line 64 – column 7, line 13**).

18. As per claim 25, Pothapragada et al teach that when executing said instructions a computer will access said indicated portions through a fibre channel switch (**Figure 2**).

19. As per claim 26, Pothapragada et al teach that a computer will perform the steps of directly controlling a local disk storage system (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**);

responding to a request from a remote data processing system to access said local disk storage system (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**);

identify a portion of said local disk processing system that may be accessed by said remote processing system (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**); and

issuing an indication to the effect that said remote processing system may gain access to said storage system via a high bandwidth switching means (**column 1, line 60-column 2, line 54 and column 6, line 64 – column 7, line 61**).

20. As per claim 27, Pothapragada et al teach that a computer will respond to said requests received over a low bandwidth Ethernet (**column 6, line 64 – column 7, line 13**).

21. As per claim 28, Pothapragada et al teach that a computer will issue said indication over said low bandwidth Ethernet (**column 6, line 64 – column 7, line 13 and column 1, line 60-column 2, line 54**).

22. As per claim 29, Pothapragada et al teach that a computer will perform RAID calculations while directly controlling said local disk storage systems (**column 7, line 62 – column 8, line 28 and column 6, line 64 – column 7, line 13**).

23. As per claim 30, Pothapragada et al teach that a computer will issue an indication to the effect that said remote processing systems may gain access to said storage systems via a fibre channel switch (**Figure 2 and column 4, lines 25-40**).

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pothapragada et al (U.S. Patent No. 6,389,432) in view of Rosasco (U.S. Patent No. 6,317,137).

26. As per claims 2 and 12, Pothapragada et al fail to teach data processing systems are based around a silicon graphics O2, Octane or Onyx2 computer.

27. However, Rosasco teaches the use of Onyx2, O2, and Octane computers (**column 10, lines 35-45**). It would have been obvious to combine the teachings of Pothapragada et al and Rosasco because Rosasco's use of Onyx2, O2, and Octane computers in Pothapragada et al's system would provide the ability to process and access multiple requests for imaging and video data in real time.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Matsunami et al (U.S. Patent No. 6,542,961)
- b. Chong et al (U.S. Patent No. 6,370,605)
- c. Burton et al (U.S. Patent No. 6,393,535)

d. Delany et al (U.S. Patent No. 6,678,809).

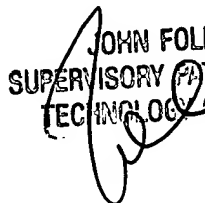
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Refai whose telephone number is (571) 272-3975. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramsey Refai
Examiner
Art Unit 2154

RR
January 27, 2005


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